

ABSTRACT OF THE DISCLOSURE

An electric power steering device enabled to surely detect a fault of its motor current detector circuit by avoiding the disturbance by an electrically insulated oxide film formed on the contact surface between the commutator and the brush of the motor. An ignition key is turned on, then the motor applied voltage is increased with time to break the oxide film so that the motor current flows normally. The estimated motor current is then compared with the detected motor current. When the absolute value of the difference between those estimated motor current and detected motor currents is over a predetermined limit value, it is determined that the motor current detection circuit is defective. It is also possible to break the oxide film by integrating each difference between the motor current command value and the detected motor current value, thereby increasing the current control value step by step and increase voltage applied to the motor.